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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/978,497      | 10/16/2001  | Jung-Hwan Choi       | 9898-199            | 7318             |

7590 03/28/2002

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EXAMINER

PIERRE, KENELT

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2822

DATE MAILED: 03/28/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/978,497

Applicant(s)

CHOI, JUNG-HWAN

Examiner

KEN PIERRE

Art Unit

2822

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 to 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 1 to 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☒ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other: \_\_\_\_

**DETAILED ACTION**

1. This office action is in response to the application filed October 15, 2001.

***Claim Objections***

2. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 20, 21 and 22 (Last 3 claims) have been renumbered 22,23 and 24.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 to 5, 7 to 11, 12 to 16 are rejected under 35 U.S.C. 102 (b) as being anticipated by Walkup et al (4850891).

Regarding claims 1 to 5, Walkup et al disclose (ABSTRACT) an electronic memory module socket (10) in which a memory module (42) (FIG 2) is easily insertable into and removable from the. (Col. 2, line 14 to 35) A longitudinal groove 18 intersects the recesses 16 and extends between the first and second ends 12 and 14 of the socket body. Each of the recesses 16 includes an electrical contact 20. (Col. 2, line 60 to 68) The socket contact is shown in FIG. 6, and includes a fixed contact portion 52 and a movable contact portion 54.

See claim 4 of the cited reference.

Regarding claims 7 to 11, Walkup et al disclose a socket device that is able to rotate to engage and disengage the memory engaged by the contact portions 52 and 54, (FIG 7A) which makes it a turn around socket also with a plurality of memory component. (Col.2, line 37 to 59) The installation and removal of the memory module from the socket is illustrated in FIGS. 7A through 7C. The memory module 42 is initially inclined on the slanted portion of the guide member 36, as shown in FIG. 7A, and the module is inserted and rotated over the locking-arms 34, as shown in FIG. 7B. (Col.2, line 60 to 65) The socket contact is shown in FIG. 6, and includes a fixed contact portion 52 and a movable contact portion 54, which is formed on the end of a generally U-shaped portion 56.

Regarding claims 12 to 16, Walkup et al disclose (Col.1, line 10 to 25) a plurality of memory components usually mounted on the memory circuit board which is plugged into the associated sockets.

See claims 1 and 2 of the cited reference..

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 and 18 to 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walkup et al (4850891) in view of Walker (5788510).

Regarding claims 6 and 18 to 22, Walkup et al disclose (Col. 1, line 5 to 25) an electronic component sockets and more particularly a socket for an electronic (42) memory module. A plurality of memory components is usually mounted on the memory circuit board which is plugged into the associated socket. Such a memory circuit board having memory components is usually referred to as a memory module. In addition, some of socket device is able to rotate to engage and disengage the memory, which makes it a turn around socket also with a plurality of memory component. (Col.2, line 60 to 65) The socket contact is shown in FIG. 6, and includes a fixed contact portion 52 and a movable contact portion 54, which is formed on the end of a generally U-shaped portion 56.

However, Walkup et al do not disclose that the socket for memory modules is daisy-chain configured.

Regarding claims 6 and 18 to 22, Walker discloses a (Col.1 line 7 to 15) socket and memory modules, which use daisy-chain configuration. (Col. 5, line 4 to 35) Daisy-chain conductive path is set up through all of the modules 22 in the socket connector 20 to insure that all of the modules are installed. Thus, within each of the modules 22, a circuit path is established between a correspondingly positioned pair of contact pads.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have recognized the benefit of using a daisy-chain configuration for the memory module socket, to insure that all of the memory modules are installed as taught per Walker reference.

This rejection is a complete treatment of the scope and the content of the prior art, the differences, and the level of skill in the art.

### ***Conclusion***

5. **THIS ACTION IS MADE NON-FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Ken Pierre whose telephone number is (703) 305-4002. The examiner can normally be reach on Monday-Friday from 8:30AM to 5:30PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Carl Whitehead, Jr. can be reach at (703) 308-4940. The fax telephone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or processing should be directed to the receptionist whose telephone number is (703) 308-

0956



March 12, 2002



CARL WHITEHEAD, JR.  
SUPERVISORY PATENT EXAMINER  
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